

## **CLAIMS**

1. (Previously Presented) A distributed network computing environment, comprising:  
a plurality of clients communicating within a multicast cloud distributed network using content-specific data within messages to implement data routing and message culling in a groupware application; and  
one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing, to permit or inhibit the distribution of a particular message based upon the content of the message.
2. (Original) The environment of claim 1, wherein the application is a distributed simulation or game.
3. (Previously Presented) The environment of claim 1, wherein the application is a client-selectable and controllable data service associated with the distribution of audio, video, or other digital signal streams.
4. (Original) The environment of claim 1, wherein the clients enter, leave, and interact with the cloud through a lobby manager.
5. (Original) The environment of claim 4, wherein the lobby manager is further operative to validate the application in terms of compatibility and download data to correct for deficiencies.
6. (Previously Presented) The environment of claim 4, wherein the lobby manager is further operative to simultaneously support multiple clouds through multicast or replicated unicast protocols.
7. (Original) The environment of claim 1, wherein the routing modules implement application-specific message culling to reduce client-cloud communications.

8. (Original) The environment of claim 7, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications.

9. (Original) The environment of claim 7, wherein the application communicates internal state changes into the cloud through an API.

10. (Original) The environment of claim 1, wherein the application is a massive groupware application involving thousands of world-wide participants.

11. (Previously Presented) A distributed network computing environment, comprising:  
a network-enabled client application;  
at least one lobby manager that facilitates communications between the client application and a federation; and  
one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing, to permit or inhibit the distribution of a particular message based upon the content of the message to reduce the communications with the federation.

12. (Original) The environment of claim 11, wherein the application is a distributed simulation.

13. (Original) The environment of claim 11, wherein the application is a game.

14. (Original) The environment of claim 11, wherein the application is a client selectable and controllable data service.

15. (Original) The environment of claim 14, wherein the data service includes audio, video, or other type of digital signal feed.

16. (Original) The environment of claim 11, wherein the routing modules further support a point-to-multipoint distributed communications model between clients.

17. (Original) The environment of claim 11, wherein:  
at least some of the client applications run on host platforms; and  
the routing modules further support conventional internet packet routing among the hosts.

18. (Original) The environment of claim 11, wherein the routing modules further support one or more conventional multicast protocols.

19. (Original) The environment of claim 11, wherein the application communicates internal state changes into the federation through an API.

20. (Original) The environment of claim 11, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications.

21. (Original) The environment of claim 11, wherein the lobby manager is further operative to validate the client application compatibility with the federation and download data to correct for deficiencies.

22. (Original) The environment of claim 11, wherein the lobby manager is further operative to simultaneously process multiple federations.

23. (Original) The environment of claim 22, wherein the federations communicate through multicast or replicated unicast protocols.